

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P555822

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-93-97-EDD-90**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P555822  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-3LO-40-UNV-93-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

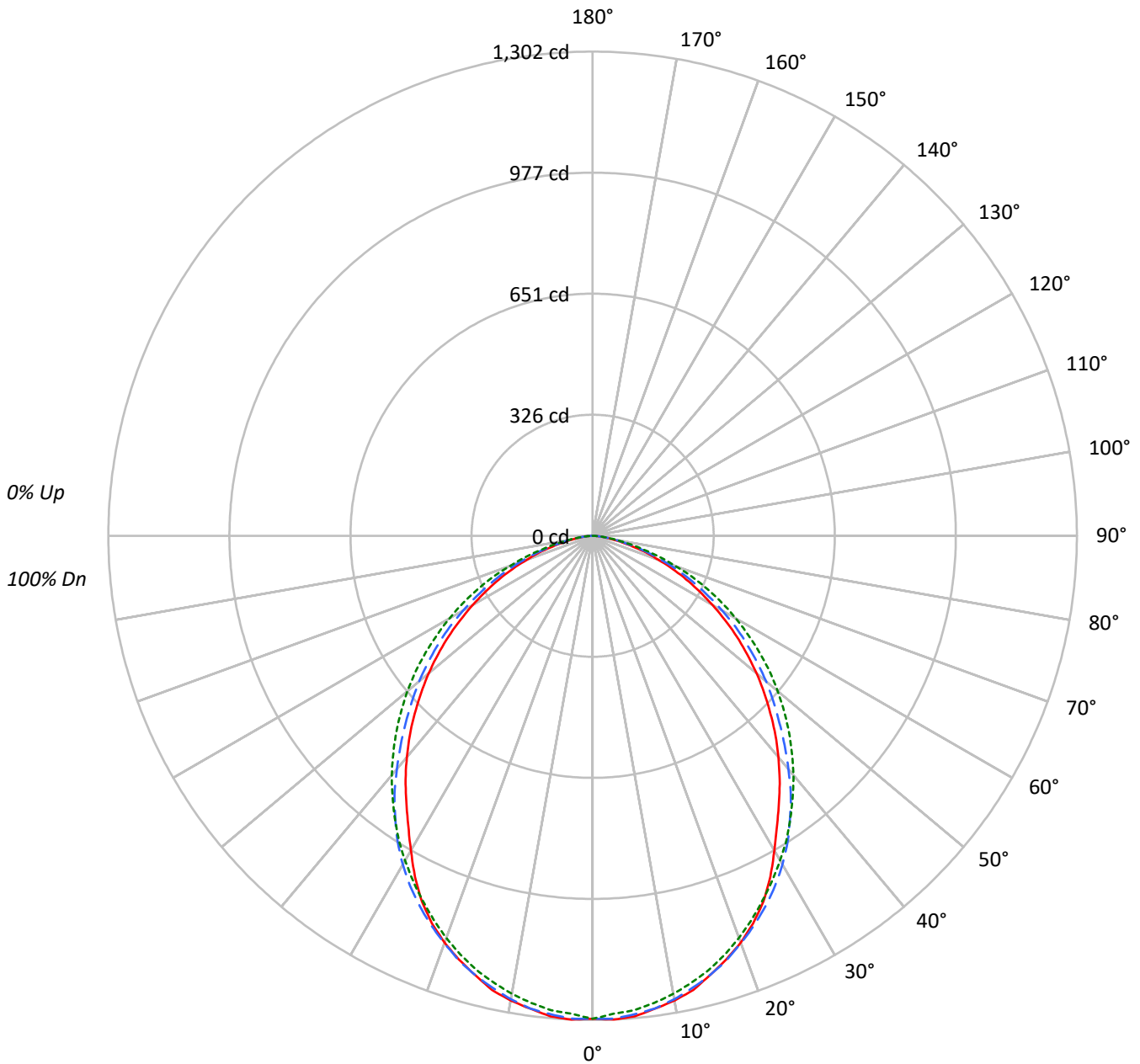
Lumens per Lamp: N/A  
Luminaire Lumens: 3003.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6990	6990	6990
5°	7008	6978	6920
10°	6934	6915	6836
15°	6811	6811	6733
20°	6667	6675	6589
25°	6447	6527	6423
30°	6071	6344	6266
35°	5736	6081	6091
40°	5458	5752	5903
45°	5146	5404	5681
50°	4817	5092	5439
55°	4443	4738	5145
60°	4001	4323	4785
65°	3533	3845	4353
70°	2944	3275	3698
75°	2314	2614	2895
80°	1655	1841	2042
85°	1081	1081	1019



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.3	4.1
10°-20°	343.5	11.4
20°-30°	502.0	16.7
30°-40°	569.8	19.0
40°-50°	550.1	18.3
50°-60°	453.8	15.1
60°-70°	302.2	10.1
70°-80°	135.2	4.5
80°-90°	24.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	967.8	32.2
0°-40°	1537.6	51.2
0°-60°	2541.4	84.6
0°-90°	3003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3003.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1297	1297	1292	1285	1281	123
15°	1222	1225	1222	1217	1208	345
25°	1086	1094	1099	1091	1082	497
35°	873	885	926	930	927	547
45°	676	688	710	742	746	522
55°	474	482	505	533	548	423
65°	277	285	302	323	342	275
75°	111	117	126	132	139	122
85°	18	18	18	16	16	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1298.7	1298.7	1298.7	1298.7	1298.7
2.5°	1302.2	1302.7	1299.7	1291.7	1286.7
5°	1297.2	1296.7	1291.7	1284.7	1280.8
7.5°	1282.8	1283.8	1282.3	1272.3	1266.8
10°	1268.8	1269.3	1265.3	1257.3	1250.8
12.5°	1250.8	1250.3	1244.8	1240.8	1230.4
15°	1222.4	1225.4	1222.4	1216.9	1208.4
17.5°	1194.9	1194.9	1196.9	1187.5	1181.0
20°	1164.0	1165.5	1165.5	1158.0	1150.5
22.5°	1128.1	1132.6	1134.1	1126.1	1117.1
25°	1085.7	1094.2	1099.1	1091.2	1081.7
27.5°	1034.3	1047.3	1062.2	1056.2	1045.8
30°	976.9	995.9	1020.8	1015.8	1008.3
32.5°	922.5	941.5	975.9	973.9	969.9
35°	873.1	885.1	925.5	930.5	927.0
37.5°	826.2	837.2	875.1	886.6	883.6
40°	776.8	788.8	818.7	839.2	840.2
42.5°	727.9	739.4	763.9	793.3	793.3
45°	676.1	687.5	710.0	742.4	746.4
47.5°	625.2	637.1	659.1	691.5	698.0
50°	575.3	586.2	608.2	639.6	649.6
52.5°	523.4	535.4	556.8	585.7	600.2
55°	473.5	481.5	504.9	532.9	548.3
57.5°	421.6	429.1	455.5	479.5	495.4
60°	371.7	381.2	401.6	426.1	444.5
62.5°	323.8	333.8	351.2	372.7	393.7
65°	277.4	284.9	301.9	323.3	341.8
67.5°	232.5	239.0	256.0	270.9	290.4
70°	187.1	195.6	208.1	222.5	235.0
72.5°	150.7	154.2	164.6	175.1	188.1
75°	111.3	117.2	125.7	131.7	139.2
77.5°	79.8	83.3	88.3	93.3	100.3
80°	53.4	54.9	59.4	60.4	65.9
82.5°	32.4	33.4	34.4	34.9	36.9
85°	17.5	17.5	17.5	16.5	16.5
87.5°	10.0	10.0	8.5	7.0	5.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)